
HART COUNTY

(Hart County Water Service Area Map)

- Estimated 1999 population of 16,900-- 93% on public water¹
- Estimated 2020 population of 19,400-- 97% on public water
- 410 miles of water lines, with plans for 50 additional miles
- Estimated funding needs for public water 2000-2005--\$3,355,000
- Estimated funding needs for public water 2006-2020--\$100,000

Hart County had a population of 16,940 (6,947 households) in 1999 with a projected population of 19,431 (8,518 households) in 2020. About 335 new households will be placed on public water through line extensions in 2000-2020.

The need for water service expansion in the Green River Valley Authority's territory of Hart County results primarily from the rapid subdivision development in many of its rural areas as well as other areas. According to a study conducted by the Kentucky State Data Center in Louisville in spring 1999, Hart County will experience population growth in excess of 15% from the year 1990 through 2000 and 31% from the year 1990 through 2020. That same study also indicates Hart County is one of four counties in the BRADD that are projected to experience population growth of more than 30% from the year 1990 through the year 2020. At present, within the territory of Hart County there are approximately 7,000 households, of which, approximately 460 households aren't currently being served or need upgrades in their system. In order to serve these households, the District's distribution system will require new water extension lines as well as many upgrades to increase and maintain an adequate flow and pressure. The approximate costs of which are outlined in the following list of projects. To meet current as well as the future needs of the county the following projects have been selected and ranked by the Infrastructure, Development and Water Supply Council, which includes Hart County system representatives, elected officials, and other members of the community. The Barren River Area Development District's Board of Directors endorses these projects as being crucial to the future growth and development of the region.

WATER SERVICE AREAS

HART COUNTY

Kentucky

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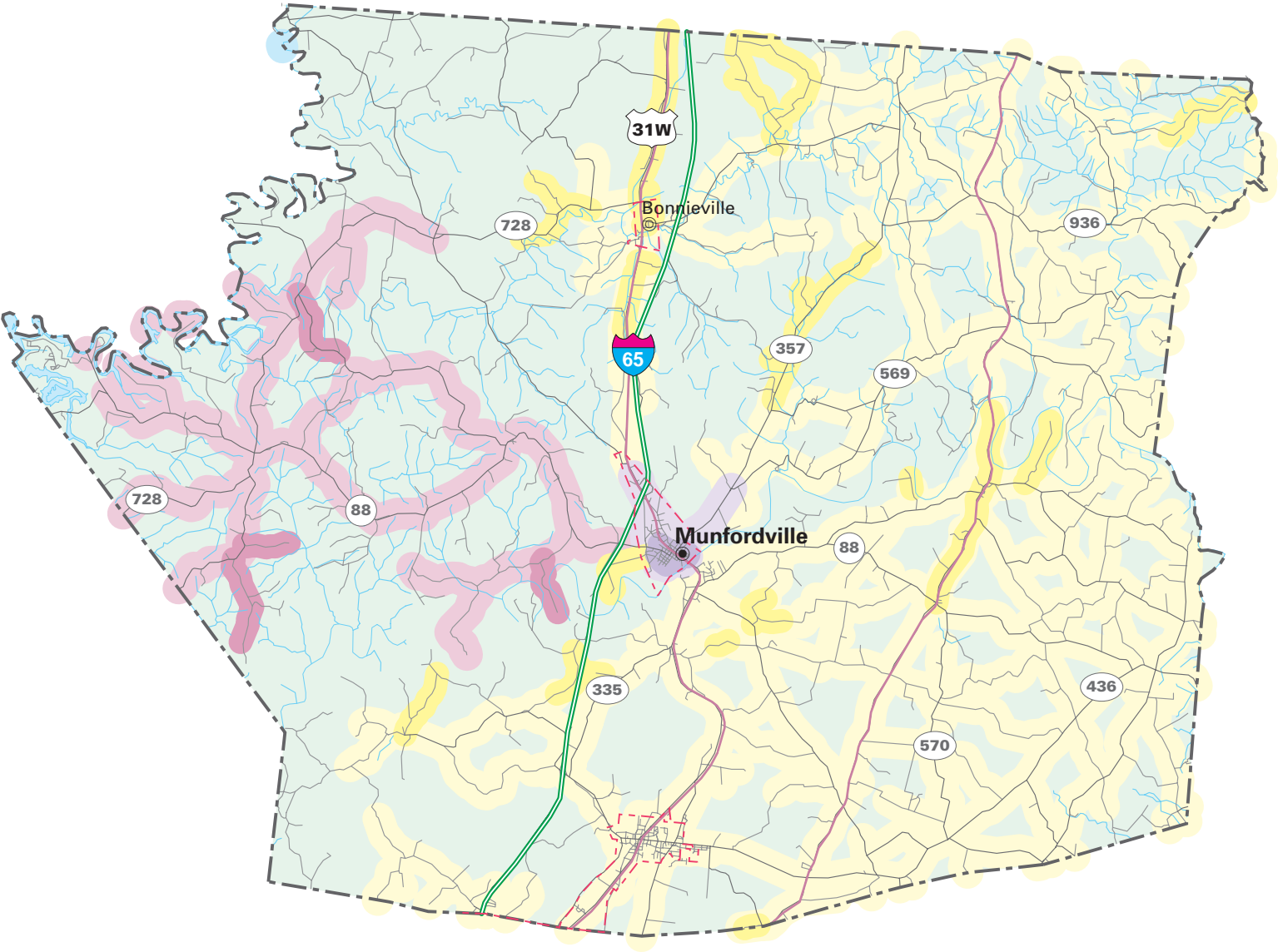
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WATER SERVICE STATUS BY OWNER			
EXISTING SERVICE AREA	PROPOSED SERVICE AREA		
		MUNFORDVILLE WATER WORKS	
		GREEN RIVER VALLEY WATER DISTRICT	
		GRAYSON COUNTY WATER DISTRICT	
		EDMONSON COUNTY WATER DISTRICT	

Estimated Costs - Proposed Projects, 2000-2005

COUNTY/System		New Customers		Rehab	Source	Treatment	Tanks/ Pumps	Total
	Miles	Number	Cost in \$1000	In \$1000	in \$1000	in \$1000	in \$1000	in \$1000
HART								
GREEN RIVER VALLEY WATER DISTRICT	46.4	286	1,600					1,600
MUNFORDVILLE MUNICIPAL WATER COMPANY	.		.	305		585	865	1,755
HART COUNTY TOTAL	46.4	286	1,600	305		585	865	3,355

Estimated Costs - Proposed Projects, 2006-2020

COUNTY/System		New Customers		Rehab	Source	Treatment	Tanks/ Pumps	Total
	Miles	Number	Cost in \$1000	in \$1000	in \$1000	in \$1000	in \$1000	in \$1000
HART								
GREEN RIVER VALLEY WATER DISTRICT	3.0	47	100			.		100
HART COUNTY TOTAL	3.0	47	100					100

PUBLIC WATER SYSTEMS

The residents of Hart County are presently provided water by the Green River Valley Water District, Munfordville Water Works, Bonnieville Water Company, Edmonson County Water District, and Horse Cave Water System.

GREEN RIVER VALLEY WATER DISTRICT

PWSID: 0500166
System Type:..... COMMUNITY
Owner Type:..... WATER DISTRICT
Surface Source:..... GREEN RIVER
Purchase Source: GLASGOW WATER COMPANY
Well Source:
Sells Water to: MUNFORDVILLE WATER WORKS
Treatment Plant Capacity (MGD):..... 4.00
Percent Daily Average Production:..... 67.00
Total Tank Storage Capacity (gallons): 4,475,000.00
Total Service Connections: 7,241.00
Number of Employees:..... 18.00
Treatment Operator Class:.....3D
Distribution Operator Class:.....4A
Customer Rate for 1,000 Gallons:..... 3.76
O/M costs 1997:..... 1,146,193.00
O/M costs per Service Connection: 217.87
Net Revenue 1997: 33,082.00
Total Water Produced 1997 (gallons):..... 982,817,000.00
Water Sold 1997 (gallons):..... 80,809,400.00
Unaccounted-for Water 1997 (%): 10.03

The Green River Valley Water District gets its water from two primary sources, Rio Verde Spring and the Green River. Also, the Glasgow Water Company serves as a secondary source for the district. These sources are described in the Hart County Water Supply Plan as an adequate supply of raw water for future needs. Services are provided in five counties: Hart, Barren, Larue, Green, and Metcalfe; and also provides water to the Mammoth Cave area. Additionally, the District sells treated water to Munfordville Water Works, Bonnieville Water Company, Larue County Water District, Green-Taylor Water District, Horse Cave and Cave City. The District operates a water treatment plant that can produce four million gallons per day. On an average day the plant produces approximately 2,692,589 gallons of water, less than 67% of its' designed capacity. The District's storage system consists of 16 tanks. The total storage capacity of the district is 4,475,000 gallons. The calculated charge for 5,000 gallons of treated water (residential usage) is currently \$18.80. The Green River Valley Water District has a total of 18 employees: one certified water treatment plant operator and five certified to operate the distribution system. The other employees provide billing and financial oversight.

MUNFORDVILLE WATER WORKS

PWSID: 0500305
System Type: COMMUNITY
Owner Type: MUNICIPAL
Surface Source:
Purchase Source: GREEN RIVER VALLEY WATER DISTRICT
Well Source:
Sells Water to:
Treatment Plant Capacity (MGD): 0.00
Percent Daily Average Production: 0.00
Total Tank Storage Capacity (gallons): 210,000.0
Total Service Connections: 719.00
Number of Employees: 3.00
Treatment Operator Class: 2D
Distribution Operator Class:
Customer Rate for 1,000 Gallons: 4.00
O/M costs 1997: Not available
O/M costs per Service Connection: Not available
Net Revenue 1997: Not available
Total Water Produced 1997 (gallons): Not available
Water Sold 1997 (gallons): Not available
Unaccounted-for Water 1997 (%): Not available

The Munfordville Water Works gets its water from the Green River Valley Water District, described in the Hart County Water Supply Plan, as an adequate supply of raw water for future needs. The Munfordville Water Works currently serves 708 customers. The storage system consists of 1 tank. The total storage capacity is 210,000 gallons. The calculated charge for 5,000 gallons of treated water (residential usage) is currently \$19.99. Munfordville Water Works has a total of three employees: two certified to operate the distribution system. The other employee provides billing and financial oversight.

The need for water line expansions in the Munfordville Water Works territory is to improve the volume and pressure of flow. At present, within the territory of Mundfordville Water Works all households are currently being served; however, the system needs some upgrades to increase and maintain an adequate flow and pressure. The approximate costs of which are outlined in the following list of projects. To meet current as well as the future needs of the county the following projects have been selected and ranked by the Infrastructure, Development and Water Supply Council, which includes Hart County system representatives, elected officials, and other members of the community. The Barren River Area Development District's Board of Directors endorses these projects as being crucial to the future growth and development of the region.

BONNIEVILLE WATER DISTRICT

PWSID: 0500032
System Type: COMMUNITY
Owner Type: WATER DISTRICT
Surface Source:
Purchase Source: GREEN RIVER VALLEY WATER DISTRICT
Well Source:
Sells Water to:
Treatment Plant Capacity (MGD): 0. 00
Percent Daily Average Production: 0.00
Total Tank Storage Capacity (G): 25,000
Total Service Connections: 245.00
Number of Employees: 1
Treatment Operator Class: 1D
Distribution Operator Class:
Customer Rate for 1,000 Gallons: 3.60
O/M costs 1997: Not available
O/M costs per Service Connection: Not available
Net Revenue 1997: Not available
Total Water Produced 1997: Not available
Water Sold 1997: Not available
Unaccounted-for Water 1997: Not available

The Bonnieville Water Company gets its water from the Green River Valley Water District, described in the Hart County Water Supply Plan, as an adequate supply of raw water for future needs. The Water Company currently serves 235 households. Storage consists of one 25,000 gallon tank. The calculated charge for 5,000 gallons of treated water (residential usage) is currently \$18.00. Bonnieville Water Company has one employee certified to operate the distribution system.

The need for water line expansions in the Bonnieville Water Company territory is to improve the volume and pressure of flow, as well as service for 33 new houses. Future growth could happen north and south of Bonnieville. At present, within the territory of Bonnieville Water Company all households are currently being served; however, the system needs some upgrades to increase and maintain an adequate flow and pressure. Currently there are not enough valves to control the pressure, so they are requesting six-inch valves for pressure and maintenance purposes. The current system was built in the 1930's with cement-asbestos pipes and need to be replaced. The approximate costs of which are outlined in the following list of projects. To meet current as well as the future needs of the county the following projects have been selected and ranked by the Infrastructure, Development and Water Supply Council, which includes Hart County system representatives, elected officials, and other members of the community. The Barren River Area Development District's Board of Directors endorses these projects for being crucial to the future growth and development of the region.

EDMONSON COUNTY WATER DISTRICT

The Edmonson County Water District serves some customers at West of Hart County. This Water district is planning to extend some water lines to serve new residents in this part of Hart County. Additional information about Edmonson water expansion can be found at Edmonson County section.

HORSE CAVE WATER SYSTEM

PWSID: 0500476
System Type: COMMUNITY
Owner Type: WATER DISTRICT
Surface Source:
Purchase Source: GREEN RIVER VALLEY WATER DISTRICT
Well Source:
Sells Water to:
Treatment Plant Capacity (MGD): 0. 00
Percent Daily Average Production: 0.00
Total Tank Storage Capacity (G): Not available
Total Service Connections: 936.00
Number of Employees: Not available
Treatment Operator Class: 2D
Distribution Operator Class:
Customer Rate for 1,000 Gallons: Not available
O/M costs 1997: Not available
O/M costs per Service Connection: Not available
Net Revenue 1997: Not available
Total Water Produced 1997: Not available
Water Sold 1997: Not available
Unaccounted-for Water 1997: Not available

PRIVATE DOMESTIC SYSTEMS

About 1,150 people in Hart County rely on private domestic water supplies: 750 on wells and 400 on other sources.

In the limestone rich area of southwestern Hart County most drilled wells are adequate for a domestic supply. Yields as high as 50 gpm have been reported from wells penetrating large solution channels. Depths of adequate wells range up to 500 feet. In the southern half and parts of north central Hart County, about three-fourth of the wells drilled yield enough water for a domestic supply. In the remaining areas of the county only a few wells yield enough water for a domestic supply except in the lowland areas bordering streams where yields are sometimes sufficient for some wells to meet the supply needs for domestic use.

Springs with flows ranging from a few gallons per minute to 35,000 gpm are found in the county. Minimum flow generally occurs in early fall, maximum flows in late winter. The larger springs in the county have sufficient flows to be utilized for public or industrial water supplies.
